

Coalition OT&E

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AIR FORCE OPERATIONAL TEST AND EVALUATION CENTER



The Law

Title 10, US Code

“The term ‘operational test and evaluation’ means --

- i) the field test, under realistic combat conditions, of any item of (or key component of) weapons, equipment, or munitions for the purpose of determining the effectiveness and suitability of the weapons, equipment, or munitions for use in combat by typical military users; and
- ii) the evaluation of the results of such test.”

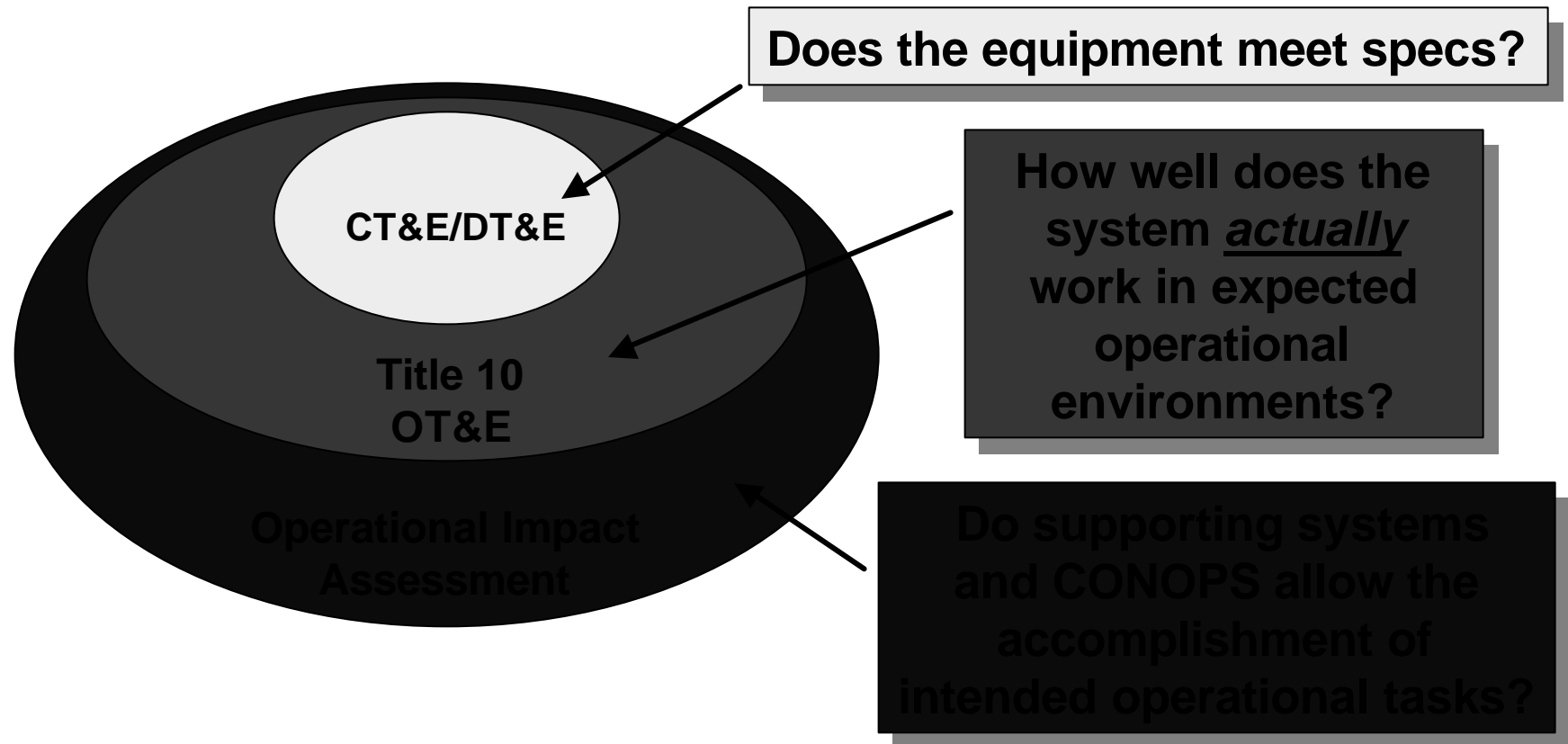


DoD 5000.2-R

Mandatory Test Conditions

- “Threat or threat representative forces, targets, and threat countermeasures, validated in coordination with DIA, shall be used.”
- “Typical users shall operate and maintain the system or item under conditions simulating combat stress and peacetime conditions.”
- “The independent operational test activities shall use production or production representative articles for the dedicated phase of OT&E that supports the full-rate production decision, or for ACAT IA or other acquisition programs, the deployment decision.”

Tests, Evaluations, and Operational Impacts



Defining Coalition OT&E

■ Traditional OT&E

- Does the system meet expectations when operated by typical personnel in the intended environment

■ Operational Impact Assessment

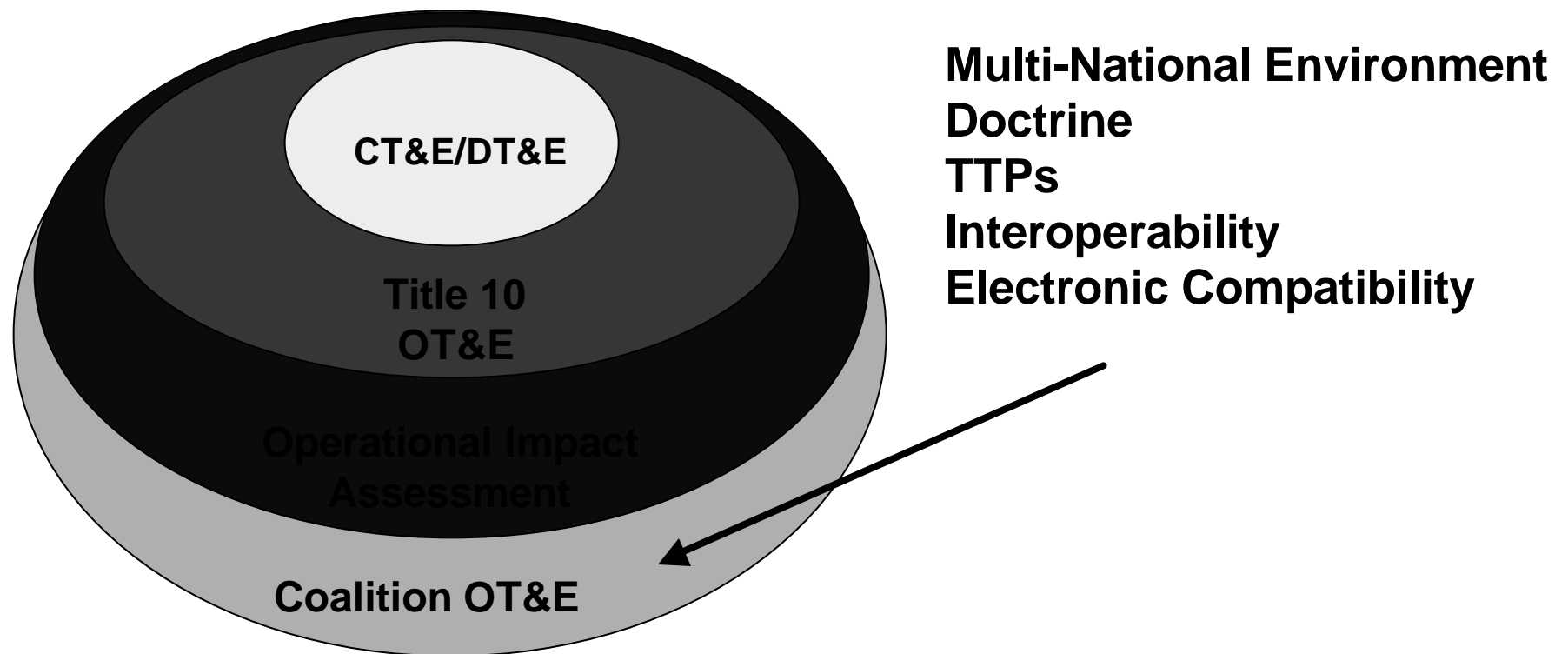
- Are supporting systems, operational concepts and TTPs (tactics, techniques and procedures) adequate?

■ Coalition OT&E

- Can the system perform in conjunction with systems from other Services/Nations?



.... And Coalition OT&E



Challenges

- **Force Modernization and Interoperability**
 - Force structure, doctrine and equipment differences
 - Rapidly changing technology
 - Transfer of Technology
 - Lack of standardization for interoperability and compatibility



Challenges (con't)

- **Differing Acquisition and OT&E Approaches**
 - Highly structure US acquisition process designed to mitigate risk
 - More flexible European process to adjust requirements to meet cost constraints
- **Funding/Affordability**
 - Constrained military budgets - US and Europe
 - High competition among needs for modernization and readiness

Forcing Functions

- **Draft DoDI 5000.2**

- “DoD must have a framework for assessing the interrelationships among and interactions between various US and Allied systems To that end, milestone decision authorities shall adopt a “portfolio” or “system-of-systems” management approach to ensure that their reviews of individual systems include a thorough understanding of all systems related to the one under review.”

- **DOT&E Initiatives**

- Interoperability
- Electromagnetic Environmental Effects



Actions

- **Develop Coalition OT&E Concept for a Selected Mission Area**
 - Address NATO participants and capabilities
 - Establish requirements to inter-operate ...operational focus
- **Work toward more OT&E in Joint Exercises**
 - Multi-Service
 - Multi-Nation
 - In conjunction with Joint Forces Command
- **Propose Joint Test and Evaluation program as initial step**

BACKUPS



Can Do

- **US involvement can support NATO with a full spectrum of OT&E services**
- **The US has invested heavily in test infrastructure**
 - **Considerable capacity exists for coalition partner use.**
 - **The US has the tools, infrastructure and experience**
 - **Coalition OT&E and partners could use our facilities, and with US collaboration, evaluate coalition weapon systems and operational concepts**
- **US's flexible non-traditional OT&E capabilities**
 - **Tailor for responsive support to NATO's needs**
 - **Experiment and training exercises**

Can Do

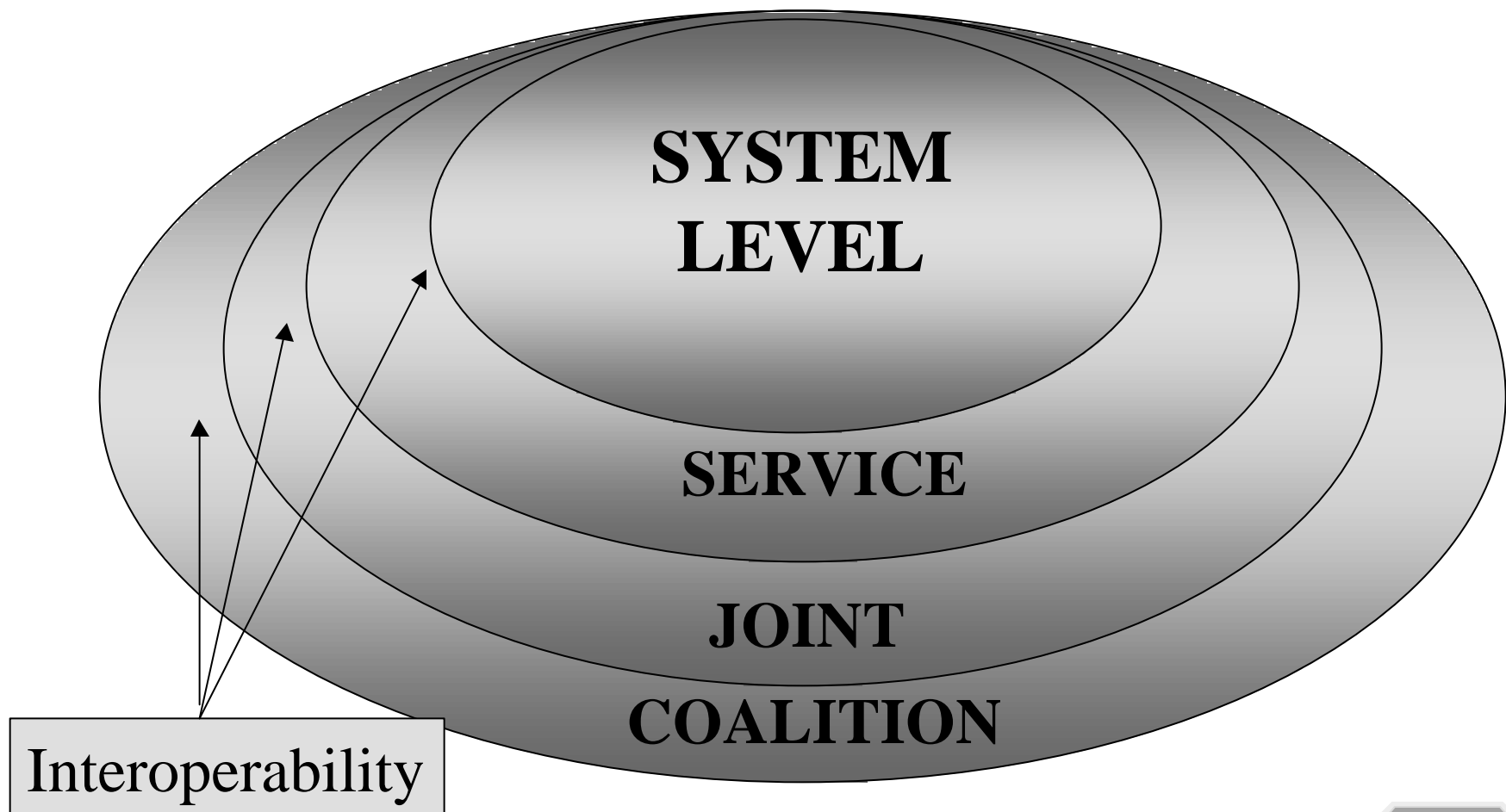
- OTAs can team with JFC to help identify new concepts that will help NATO in its modernization.
- OTAs can support the proof of concepts and the implementation of concepts.
- OTA support could be from ACTDs to EFX all the way to Worldwide Olympic Experiments and Exercises.
- Could examine interoperability T&E infrastructure (such as Distributed Engineering Plant) to extend to Coalition Partner capabilities

Can Do (Cont'd)

- **NATO members can test capabilities collectively to ensure interoperability for increased success in future military actions,**
- **The service OTAs have an opportunity to help this happen in a better, faster, cheaper way.**
- **Service OTAs through their participation will have better knowledge and access to world class, state of the art models and simulations**
 - **Share cost across NATO participants**



Increasingly Complex Environment



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